... unites Ontario's municipalities

Report Series 1992

92-5

AMO's Policy on Refillable Beverage Containers

Association of Municipalities of Ontario
April 1992

MISSION STATEMENT

AMO unites Ontario's municipalities.

We take pride in promoting, supporting and enhancing strong and effective municipal government.

We provide strategic leadership by:

- developing and effectively promoting responsive quality policy;
- informing and educating governments, the media and the public;
- marketing innovative and beneficial services.

Our elected representatives, municipal officials and association staff form a team which values and respects:

- diversity and local autonomy;
- fairness and equity;
- consultation;
- consensus;
- co-operation.

92-06696/

TABLE OF CONTENTS

PAGE

Executive Summary E-1

1 Introduction 1

2 Waste Management Background Information 2

2.1 Brief History of Solid Waste Management 2
2.2 Background Information on Refillable Containers 6
2.3 The Role of Refillables in Other Jurisdictions 11
2.4 Refillable Plastic Bottles 19

3 AMO's Position 21

3.1 Previous AMO Positions on Refillables 21
3.2 AMO Principles on Refillables 24
3.3 Supporting Discussion and Recommendations 25
3.4 AMO Response to Industry Initiatives 34
3.5 Extending to Other Containers 37

4 Conclusion 38

Summary of Principles and Recommendations 39

Appendix A - Canada's Beverage Container Deposit Systems 41

Appendix B - Beverage Container Deposit Systems in the United States 42

Acknowledgments 43

Endnotes 45

EXECUTIVE SUMMARY

Municipalities have traditionally managed and financed the collection and disposal of municipal solid waste. Today, the responsibilities of waste management are much greater and include activities such as collection, disposal, recycling, composting, and management of household hazardous waste. As a result, municipalities are very interested in finding viable waste management techniques that reduce municipal costs. Refillable beverage containers provide one such alternative.

AMO's Policy on Refillable Beverage Containers presents AMO's most up-to-date policy concerning the issue of refillable containers. It also responds to the Ontario Soft Drink Association (OSDA) top-up offer to municipalities.

AMO's Policy on Refillable Beverage Containers has two main sections: background and position. The background section can be used as a reference for refillable related issues. Since the refillable issue is closely related to solid waste management, especially recycling, this area is briefly examined. The beverage industry, which has the most obvious reuse potential, is then profiled. In this, the past activities and future plans of the beer brewers, the soft drink industry, and the Liquor Control Board of Ontario (LCBO) are discussed. The section concludes with a presentation of the waste management efforts which are under way in other jurisdictions, including Canada, the United States, and Europe.

The position section of the paper contains AMO's recommendations regarding refillables. AMO cannot take a position other than strongly urging the provincial government to increase the presence of refillable containers. AMO sees two main reasons for pursuing refillables. First, reuse (which includes refilling) is higher on the 4Rs waste minimization hierarchy than is recycling. (The 4Rs hierarchy is ordered as follows: reduce, reuse, recycle and recover energy from waste.) Second, under the present circumstances it is apparent that Ontario's current recycling systems and their financial supports are not self-sufficient or sustainable in the long term.

AMO's support for refillables is backed up with constructive ways to implement a refillable container

system. AMO believes that the beverage industry has, with refillable plastic bottle technology, an opportunity to lead changes in waste management just as it did when it initially promoted Blue Box recycling.

Thus, AMO recommends that the entire beverage industry voluntarily, or be legislated by the provincial government to, provide refillable containers as a consumer option and institute a deposit system to collect these containers. Minimum refill sales targets should be enforced in the soft drink industry and should be planned for, with strict time-frames, in other beverage industries. AMO also recommends that the government initiate consumer-oriented, economic incentives in beverage sectors which cannot meet their targets.

AMO believes that if such steps are taken, the resulting beverage container system would be equitable and sustainable. The system would promote full-cost accounting of waste management within the private sector. As a result, waste management would become consumer-based, not taxpayer-based, since costs would be reflected in consumer prices. The system would also provide private industry with the incentive to improve, through reducing and reusing, the waste aspects of its products and packaging.

Based on these arguments, AMO rejects OSDA's offer to top-up Blue Box operating costs and encourages municipalities not to accept the offer. However, recognizing the financial need of some municipalities' Blue Box programs, AMO provides some caveats to include in any short-term financial agreements which municipalities make with OSDA.

AMO is also interested in expanding the concept of refillable containers from the beverage industry to other packaged products. Implementing a system of refillable beverage containers could set the tone for future changes to the management of other waste products.

In the final analysis, AMO would like the private sector, and the consumers of its products, to take more responsibility for their waste. In the beverage industry, refillable bottles provide an obvious solution to pressing waste management problems. The use of refillables moves waste up the 4Rs hierarchy, is sustainable in the long term, and provides a potential model for future waste management changes.

1 INTRODUCTION

On October 15, 1990, Ontario's Minister of the Environment, the Honourable Ruth Grier, said, "I will no longer allow the manufacturers of waste to pass the buck to the public, their municipal governments and the recyclers." Since most consumer items eventually end up in the waste stream, and since municipalities are responsible for most waste management activities (garbage collection, the Blue Box recycling system, and landfill siting and maintenance), this announcement was welcomed by Ontario municipalities and the association which represents their interests. However, since that time, the Minister's stance has not resulted in many concrete actions which will ease the burden for municipal taxpayers.

The issue of refillable containers presents the Ministry of the Environment (MOE) with the opportunity to demonstrate its long-term vision of waste management for the province. In an effort to assist the Minister with her analysis and decision, the Association of Municipalities of Ontario (AMO) has prepared this document, which presents the municipal perspective on the refillable beverage containers. AMO hopes this document will aid the Minister of the Environment and her staff as they work to resolve this issue.

In considering the refillables issue from a municipal perspective, it is useful to know that municipalities:

a) wish to reduce the amount of waste going to landfill, thus extending landfill lifespan;

b) desire a fair and equitable distribution of waste management costs.

These perspectives have resulted in many waste management positions and been expressed in many of AMO's reports. Positions include support for:

- the 4Rs waste minimization hierarchy (reduce, reuse, recycle and recover) and the Blue Box curbside recycling system;

- regulatory actions that have producers accept their environmental responsibilities. For example, AMO has consistently encouraged the Ministry of the Environment (MOE) to enforce minimum

refill requirements on the soft drink industry.

In this position paper, AMO presents a background of waste management issues in Ontario, including discussions on landfill capacity, waste management initiatives and the Blue Box curbside recycling program. This puts the issue of refillables into the context of other waste management issues. The paper continues with information on the refillable activities and plans of the beer, soft drink and liquor distribution industries. It then explores the issue of refillables in other jurisdictions, including overviews of some Canadian provinces, American states and European countries. This provides readers with the options being considered in other jurisdictions. The paper also presents a recent advancement in refillable technology: refillable plastic bottles. After this background, AMO's position on refillables is detailed. AMO continues to support refillable containers and backs this position up with justification and constructive ideas on implementation.

2 WASTE MANAGEMENT BACKGROUND INFORMATION

2.1 Brief History of Solid Waste Management

The advent of municipal collection in the 1930s, built-in product obsolescence of the 1950s and 1960s, and the disposable society of the 1970s and 1980s has placed considerable stress on Ontario's landfill capacity. The impacts of our waste disposal activities are many. Ontario sends 10 million tonnes of refuse to landfill every year.[1] On a per capita basis, this is among the highest in the world. Forty per cent of the total waste stream comes from the residential sector and 21 per cent (by mass) is containers and packaging. Of 1400 active landfill sites in Ontario, 100 are expected to close by the end of 1993 and 150 more by 2003.

At the same time as sites are closing, it has become increasingly difficult to find new landfill sites. The improved organization of community groups and the rise of environmental awareness at the grassroots level has led to the NIMBY (not in my backyard) syndrome. New landfill sites are now fiercely opposed in almost every community where they are proposed, which means that siting them is a lengthy process.

One way to extend the life of a landfill is to divert waste so it does not reach the landfill. The 4Rs waste minimization hierarchy (reduce, reuse, recycle and recover) has been developed to encourage this. Reducing means decreasing raw material use and product consumption. Reusing includes repeatedly using a product or container, or repairing dysfunctional items. Recycling implies reclaiming used products and reprocessing them into similar products. Recovery options extract energy from waste by burning it as fuel. AMO supports this hierarchy and has lobbied for more emphasis to be placed on reducing and reusing.

The Ontario government has been active in trying to divert solid waste and has proposed some waste management initiatives. The cornerstone of these is the goal of reducing solid waste volumes by 25 per cent by 1992 and 50 per cent by 2000. Waste management activity has increased markedly at the provincial level since 1990, and throughout these developments the Ministry of the Environment has frequently worked as partners with AMO. AMO now has regular meetings with the Minister of the Environment and MOE staff frequently update and consult with AMO on solid waste management issues. AMO appreciates this consultation and is pleased that it can bring the broader municipal sector's perspective to these important discussions.

The Blue Box System

In 1981, the City of Kitchener instituted Ontario's first municipal Blue Box program, thus putting into practice the third R: recycling.

In 1986, OMMRI (the Ontario Multi-Materials Recycling, Inc., an organization spawned by the soft drink industry), was formed to meet provincial recycling targets. Working with the provincial government, OMMRI's goal was to extended the Blue Box system throughout the entire province.

Municipalities implemented the system but had no input into its formation. Blue Box capital costs were evenly split between the province, OMMRI and municipalities. A provincial grant currently helps pay for operating costs for the first five years of a Blue Box implementation, but municipalities still pay most of these costs. Revenues from the sale of Blue Box materials were expected to pay for operating costs and thus make the system

financially self-sufficient. Municipalities never expected Blue Box revenues to cover operating costs and they have been proven correct.

In 1990, OMMRI II was formed. This was to be a coalition of 1700 businesses which planned to spend $45 million over five years on Blue Box capital costs.

The provincial government has budgeted $43 million for Blue Box capital and operating costs for 1991-92.[2]

The Blue Box now services 410 jurisdictions and approximately two-thirds of the provincial population. The overall effectiveness of the system has been debated. It has definitely increased public awareness of waste issues, but only diverts between 15 and 25 per cent (by mass) of household waste and costs between $120 and $200 per tonne to do this. However, households have embraced the system to such an extent that waste management experts are concerned that other waste management options may be precluded.[3]

The distribution of Blue Box materials shows that beverage containers, made from glass, steel and the plastic PET, form a significant portion of the Blue Box material (given as a percentage by mass):

Material	*OMMRI figures*	*Halton Region figures (without cardboard)*
Newspaper	76.7	75.6
Glass	14.7	16.4
Steel	7.0	7.4
PET	0.3	0.3
Aluminum	1.3	0.2

Consumers Glass estimates that 50 to 60 per cent of Blue Box glass originates from the Liquor Control Board of Ontario (LCBO) containers.[4] This is a significant amount, especially since the LCBO does not financially support the Blue Box program. The Ontario Soft Drink Association (OSDA) says that its containers, mostly steel, account for about two per cent of Blue Box mass. Soft drink containers account for almost all PET found in Blue Boxes. Thus, the beverage industries account for roughly ten per cent of Blue Box material.

This portion could grow to be even larger. In its LCBO study, the consulting firm Proctor and Redfern

calculated that 38 per cent of all LCBO glass containers are recycled[5] (equivalent to 62 per cent when only considering households with Blue Boxes). The overall recovery rate for soft drink containers has been estimated at 21 to 25 per cent.[6] It has been estimated that Blue Box recovery rates may have an upper limit as high as 67 per cent, but they could be as low as 40 per cent.[7]

Recent Blue Box Development

Recent events have raised concerns about the future of the Blue Box system in its present form. Events include:

- quality criteria have become stricter, especially from Consumers Glass, the only purchaser of Blue Box glass;
- revenues from aluminum, by far the most lucrative material recovered in the Blue Box, have been drastically reduced as a result of the soft drink industry changing to steel cans;
- commodity prices for all Blue Box materials have dropped significantly over the years, with newspaper, glass and steel prices not high enough to cover their costs of collection;
- in February 1991, the Waste Reduction Action Plan announced that the MOE intended to make recycling mandatory in all communities with more than 5000 people and expand the types of materials going into the Blue Box to include more plastics and paper products. This would mean added financial pressures on all of these communities;
- in March 1991, the MOE's Waste Reduction Office estimated that current waste management efforts would divert volumes by only 13 per cent by 1992 and 22 per cent by 2000. This clearly demonstrates that current Blue Box efforts are not sufficient to meet waste diversion targets;
- OMMRI is in severe financial difficulty. In December 1991, OMMRI was unable to provide letters of commitment for $2.0 million in outstanding eligible grant requests from Metropolitan Toronto. Other municipalities have been told by OMMRI that they can expect delays of six months to two years for the OMMRI share

of Blue Box capital cost funding.[8] This financing was promised to municipalities when the new Blue Box funding assistance program began under OMMRI II in 1990.

These concerns have municipalities looking for improvements to the waste management structure, including changes to Blue Box funding and policies concerning refillable containers.

2.2 Background Information on Refillable Containers

Much of the current debate on reusables has focused on the beverage sector largely for historical reasons. First, the soft drink industry became a visible target for change as a result of the litter concerns of the early 1970s. This industry has continued to be a target for later waste management concerns. Second, virtually all consumable beverages had been sold in refillables before the 1970s. Thus, today's solid waste problems created by beverage packaging can be resolved with a clear model from the past.

The beverage industry has three major stakeholders: the brewing industry, soft drink makers and the Liquor Control Board of Ontario which is the provincial distributor of wine and liquor.

2.2.1 Brewers Retail

In Ontario, the Brewers Retail, Inc. (BRI), which is controlled by the country's two major breweries, manages the distribution of domestic beer and the collection of empty containers. Both functions are performed at their 300 retail outlets. Deposits on bottles and cans are added to the purchase price and are returned to the consumer upon return of the container.

The following information demonstrates the effectiveness of the BRI deposit system:

Container Type	*Sales Volume*	*Recovery Rates*
refillable glass	83%	98%
recyclable cans	17%	71-85%*

* the lower figure is based on an earlier $0.05 deposit, the higher figure based on $0.10 deposit implemented in April 1991.[9]

Domestic beer bottles have been sorted, cleaned and refilled since being offered for public sale. These costs have always been incorporated into the price of the product. Municipalities are virtually unaffected by the packaging issues of domestic beer although some containers may enter the Blue Box.

Imported beer is sold through the LCBO and these containers are not accepted by BRI. Thus, these containers are not refilled but are either disposed with garbage or placed in Blue Boxes.

2.2.2 OSDA and the Waste Minimization Action Plan

The soft drink industry and its representative, the Ontario Soft Drink Association (OSDA), has been involved with waste management issues since litter became an issue in the early 1970s. In the 1990s, with the issue of refillable containers, they are particularly affected by waste management concerns. The following is a brief history of relevant issues related to the soft drink industry and waste management:

Early 1970s efforts to control soft drink packaging because of litter concerns;

1976 Ontario regulation 687/76 that imposes a 75 per cent refillable container constraint on the soft drink industry. In 1978, the industry met this requirement with 76 per cent of sales volume being in refillables;

1979 federal ban of popular 1.5l refillable bottle;

1984 refillable sales drop to 50 per cent;

1985	Ontario regulation 623/85 allows aluminum and PET plastic soft drink containers, but stipulates that 50 per cent of containers be recycled and that 30 per cent of containers sold be refillable. Refillable sales soon dropped to 40 per cent, then 30 per cent;
	In reaction to these recycling goals, OMMRI was formed;
Feb. 1990	creation of OMMRI II, a 1700-business coalition which planned to spend $45 million over five years on Blue Box capital costs;
Oct. 1990	the new Minister of the Environment serves notice that waste producers, and especially the soft drink industry, will have to take more responsibility for their waste;
June 1991	sales of soft drinks in refillables drops to less than 13%.

In June 1991, OSDA released its Waste Minimization Action Plan and, in February 1992, it released an accompanying document.[10] These papers attempted to prevent the provincial government from imposing a deposit/refill system. In the papers, OSDA argued that it had developed an alternative which addressed product stewardship concerns. OSDA wanted to be exempted from the 1985 refillable regulations (i.e. 30 per cent refill quotas) as a condition of this plan's widespread implementation. OSDA also wanted other beverage makers to implement similar plans.

OSDA pointed out that while soft drink consumption had increased by 24 per cent since 1985, waste had decreased by 33 per cent. Producers reduced the amount of waste they generate by extending the life of their refillable bottles and by "lightweighting" containers - primarily by selling more product in metal cans and PET plastic. OSDA said that consumer demand for convenient containers has resulted in the recent drop in soft drinks being sold in refillable containers, and argued that regulations cannot control consumer preference.

OSDA has proposed a number of initiatives in reduction, reuse and recycling in an attempt to accept more responsibility for its waste generation. Reduction activities include continued container lightweighting and waste minimization within their production facilities. Reuse is to be encouraged by guaranteeing the availability of refillable containers at 98 per cent of retailers, providing equal promotion for refillables, offering a $0.10 bonus "reward" on refund of refillables (i.e. a deposit of $0.40 and a return of $0.50), researching new refillable containers, and encouraging the use of refillables in the hotel, restaurant and institutional sectors.

Of most interest to municipalities were OSDA's recycling initiatives, which included:

- continued capital cost funding, through OMMRI, to expand the Blue Box system to the industrial, commercial and institutional (IC&I) sectors and to multi-dwelling complexes;

- installation of soft drink recovery containers at points of sale and funding for anti-litter campaigns, both of which OSDA expects to increase container recovery rates;

- a guarantee of meeting recycling recovery levels of jurisdictions employing deposit systems once the Blue Box system was expanded to all municipalities of more than 5000 people. If these levels were not met, the industry would voluntarily adopt a deposit system. OSDA implied that Alberta's 65 per cent recovery rate was a reasonable target;[11] and

- a top-up grant to assist municipalities with their Blue Box operating costs.

Top-up grants were designed to appeal to municipalities because of the promise of up-front financial assistance for Blue Box programs from waste producers. The mechanism proposed was:

Top-up =	Average Operating Costs	- Soft Drink Container Revenue	- Avoided Disposal Costs*	- Other Grants

* Avoided disposal costs are costs which would otherwise be incurred if this material was to be landfilled.

OSDA anticipated that its top-up portion would be $40 to $60 per tonne of soft drink container material. This figure was based on Blue Box operating costs of $175 per tonne. OSDA's grant would be re-negotiated with municipalities on a yearly basis.

2.2.3 Recent Activity at the LCBO

The Liquor Control Board of Ontario (LCBO) has remained quiet regarding recycling and refillables until recently. In December 1991 it released Environmental Options for Alcohol Beverage Containers, a report prepared by the consulting firm Proctor and Redfern.[12]

The purpose of the report was to "assess the financial, economic, operational and safety and health implications of proceeding with various recovery systems designed to reduce, reuse and recycle alcoholic beverage containers."[13] Five systems were analyzed. These included: an expanded Blue Box, a deposit-refund-recycle through the LCBO, a deposit-refund-recycle through a depot recovery system, a deposit-refund-refill through the LCBO and a deposit-refund-refill through a depot recovery system.

The deposit systems would function similar to BRI's, with the question of who would claim unredeemed deposits still to be decided.

Their was extensive analysis but no recommendations were made. Nonetheless, the analysis showed that, compared to all other options, the "Deposit-refund-refill through the LCBO" option diverted the most tonnes of waste from landfill, conserved the most raw materials, energy and land, and prevented the most air emissions.

Compared to other deposit options, the "Deposit-refund-refill through the LCBO" option had the lowest total cost per additional tonne diverted, the second lowest total cost and the second lowest total cost per tonne diverted.

2.3 The Role of Refillables in Other Jurisdictions

Reusable containers, such as refillables, provide one option for assisting in meeting provincial waste diversion objectives. In order to analyze this option it is useful to look at the role of refillable containers in other jurisdictions. As in Ontario, most of these jurisdictions have focused on beverage containers.

The discussion of each jurisdiction includes refill or recycling regulations, their motivation and ultimate goals, a description of implementation to present and the results of these actions. Much of the information presented below has come from research done by Proctor and Redfern and the Container Recycling Institute from Washington, D.C.[14] Supplementary information on European systems has also come from a draft report of the Organisation of Economic Co-operation and Development[15] (OECD) and a recent text on packaging responsibility which was written for industrialists[16].

Unfortunately, information regarding cost is not comparable among jurisdictions since initiatives are at different stages and cover dissimilar container types. "Costs per tonne diverted" are given when available.

Unless otherwise stated, deposit-refund systems are referred to as deposit systems where the full and equal deposit is returned to the consumer. (Deposit systems can recover containers either for refilling or recycling.)

2.3.1 Canada

Three jurisdictions are of note in Canada: New Brunswick, British Columbia and Alberta. All three have some form of curbside recycling, although none is as extensive as Ontario's. Appendix A provides more details of other provinces' activities.

New Brunswick

New Brunswick is noteworthy because it, along with British Columbia, has been mentioned by Ontario's Minister of the Environment as having a refillable container system which is being analyzed by her office.[17]

New Brunswick was attempting to encourage refillables over recyclables with Bill 76, which was to modify its

Beverage Containers Act. Changes were expected to be in place by April 1992.

Bill 76 stipulated that all beverage containers would require a $0.10 deposit. When returned, refillables would be redeemed for the full deposit and non-refillables would only be eligible for half of their deposit back. Non-redeemed deposits were to be split between regulated industries and the provinces's Environmental Trust Fund. The province was expecting that consumer pressures would force beverage producers to expand the market share of refillables and introduce refillable PET containers.[18]

Containers were to be returned for redemption at existing bottle dealers, thus taking advantage of infrastructure already in place. These dealers are currently privately run and have traditionally handled beer containers.

Recovery rates for all beverage containers are expected to be about 85 per cent. Cost estimates are unavailable.

British Columbia

The Litter Act mandates a deposit for the recovery of beer, cider and cooler containers, and stipulates that a refund must be given for all returned soft drink containers. Wine and liquor bottles are not regulated in any way. Although no requirements for refillables are stipulated in the Litter Act, deposits on milk containers are voluntarily applied by industry and are gaining in popularity.

The operation of B.C.'s deposit system is similar to that of Ontario. The Pacific Brewers Distributors organize the collection of beer, cider and cooler containers. Thirty-five per cent of beer is sold in refillable bottles (compared to 83 per cent in Ontario), and these containers have a 96 per cent recovery rate. Soft drink refillables represent 15 per cent of sales and are declining. However, at a 98 per cent recovery rate, they have the highest return rate in Canada.

The refund system is currently unregulated, but a review of the beverage container regulations is under way. The B.C. Ministry of the Environment anticipated that all beverages would be regulated by a comprehensive deposit system by May 1992.[19]

Alberta

Alberta is distinct in that it has a widespread depot system. Most beverage containers require a deposit which is redeemed when the container is returned to a depot. The province regulates, but does not finance, the depots. Financing is covered by the industry, which pays a handling fee to depots. Alberta has no refillable requirements.

The only containers not requiring a deposit are those of domestic beer, milk and beverages sold in drink boxes (such as Tetra-Paks). Beer is exempted because of a successful deposit-refill system operated by the Alberta Brewers Agents. Drink boxes are exempted until they can be made recyclable.

Refillable beer bottles have a recovery rate of over 95 per cent. Recovery rates average 60 to 65 per cent for all other containers. It is not known what percentage of recovered containers are refillable nor how these are sorted by the depots.

The system has been criticized for many reasons,[20] including its high cost per tonne of diverted material ($625 per tonne excluding beer calculated in an Alberta Soft Drink Association study[21]), low waste diversion rates (0.5 per cent of total waste stream), and hidden subsidies to drink box beverages.

2.3.2 United States

Over half of the American population lives in areas with less than ten years of landfill capacity remaining. Despite this fact, surprisingly little effort has been made to reduce waste on a nationwide basis. Most waste management activity occurs at the state or local level.

Ten million American households, or less than ten per cent of the population, have access to some form of curbside recycling programs. No state has any requirements on refillable beverage containers, but ten states have "bottle bills" which mandate deposits on beer and/or soft drink containers. These deposits have resulted in container recovery rates of 70 to 95 per cent.

While there is no conclusive proof that deposits ensure the availability of refillable containers, neither do deposits ensure their demise. For instance, American

states with deposit systems sold 16.15 per cent of beer in refillable bottles. In other states, only 3.54 per cent of beer was sold in refillables.[22]

Appendix B provides information on the ten deposit states, as well as Columbia, Missouri, the only American municipality which imposes a deposit system. Ten of the eleven jurisdictions have complementary curbside recycling programs in place, demonstrating that deposit and curbside systems are not mutually exclusive. In fact, in Seattle, Washington a recent study showed that a deposit law would not harm the curbside program in that city. Similarly, Oregon sees a deposit system and a curbside program as true complements to each other[23].

Examples of how a few states have approached the beverage container issue are now presented.

Maine

Maine wishes to achieve recycling and composting targets of 25 per cent of municipal solid waste by 1992 and 50 per cent by 1994. In an effort to reach these targets, the Maine Returnable Beverage Container Law of 1978 has been amended several times, most recently in December 1990. It now requires deposits on almost all beverage containers (beer, soft drink, juice, water, wine and liquor). Milk containers have been exempted.

Containers are redeemable at either their place of purchase or a "redemption centre". Redemption centres are privately run and receive a three cent handling fee for sorting bottles. This fee is paid by the beverage industry. Distributors are responsible for retrieving their bottles from retailers and redemption centres.

Overall cost per tonne of recovered material is $402(US). Recovery rates are high: beer and soft drink containers at 90 per cent, wine and liquor containers at 75 to 80 per cent, and juices at about 75 per cent.

Despite this success, the effectiveness of the Bottle Bill has been questioned because beverage containers only compose six per cent of the residential solid waste stream.

Oregon

Oregon's bottle bill is the Oregon Beverage Container Act. This mandates a deposit on all beer and soft drink containers. Oregon has also introduced curbside

recycling for all but two communities of more than 4000 people.

Deposits are built into the wholesale price and are thus hidden from the consumer. Nonetheless, because the public was already used to voluntarily taking materials to redemption centres, container recovery rates are estimated to be about 85 to 93 per cent.

California

The system in California is very complicated and oriented totally around recycling. No deposit per se is required by the consumer. However, a container may be redeemed for 2.5 cents or five cents, depending on size. Distributors pay two and four cents respectively into a state fund to finance the refunds, and unclaimed redemption payments pay for administrative costs. (Return rates of over 80 per cent place the financial viability of this program in jeopardy.) Container manufacturers also pay a processing fee for containers which are cheaper to scrap than recycle. The collected money is redistributed to recyclers to offset the decline in the value of recyclable materials which occurs when successful recycling programs increase material supply.

Private industry was able to capture 52 per cent of beverage containers in 1989,[24] and 84 percent most recently.[25] This success has meant that California is finding it hard to pay the redemption values and is asking distributors for more money to cover redemptions.[26]

2.3.3 Europe

With the coming union of the European Community (EC), there has been a great effort to achieve a common environmental policy to reduce non-tariff barriers between member states. For example, Directive 85/339 aims to reduce the number of containers of consumable liquids entering the waste stream. This directive has been criticized for being too "soft" and work is under way to strengthen it.

Europe is viewing waste management not as a public responsibility (as it traditionally has been), but as a responsibility to be borne by waste generating industries and their consumers. A new directive is expected to apply to all packaging material and to shift the

responsibility for waste management from governments to raw material suppliers, goods producers, retailers and consumers.

Despite the common environmental policy, European countries have, and are expected to maintain, their own waste management policies. Many countries have followed a number of common principles in developing their waste regulations. These are a focus on packaging, a "user pay" perspective, and the use of economic instruments such as deposits and taxes. Also, while their goals and targets may be fixed, there is a willingness by governments to negotiate with industry stakeholders on how to achieve these goals.

Denmark

Denmark has the most aggressive waste regulations in the world. In 1981 it banned non-returnable beer and soft drink bottles which do not carry a deposit. Since that time, the country has required that all such containers be refillable, effectively banning metal cans. Deposits are still required on containers in order to ensure high recovery rates. In addition, the country attempted to standardized containers by reserving the right to approve them before they could be sold in the country.

These policies were legally challenged as being trade barriers, but the EC Court found that Denmark's policies were necessary to uphold one of the declared objectives of the EC: the protection of the environment. The landmark ruling allowed Denmark to maintain its ban on metal containers, but foreign containers were allowed to bypass the container approval process as long as a deposit was initiated and the container producers took responsibility for refilling or recycling their containers.

Germany

The German packaging regulations are the most extensive anywhere. Germany prohibits packaging wastes from entering the waste stream and requires a refundable $0.40 deposit on every liquid container (including beverage, detergent, paint and oil containers).

In order to avoid the deposit system, the private sector has established a "dual system", also known as the "Green Dot" system. With the alternative system, consumers pay no deposit on packages marked with the

dot, but must return the packaging to a neighbourhood centre for discard. Producers pay a per-container user fee (between two and twelve cents), which funds the system.

The German government intends to maintain the present market share of refillable containers. These levels are 17 per cent for milk and 72 per cent for beer, soft drinks, juices and mineral waters. If these levels are not maintained, non-reusable containers will be excluded from the "Green Dot" system and subject to a deposit. A December 1991 draft regulation ultimately targets refillable market share for beverages at the following levels:

beer and bottled water	94 per cent by 2001
soft drinks	82 per cent by 1999
wine	50 per cent by 1999
milk	31 per cent by 1999

The Netherlands

The focus in the Netherlands has been on recycling, with only recent emphasis on reuse. By 2000, the Netherlands wants to decrease total waste by 10 per cent by increasing the amount diverted through reusing, recycling and incinerating.

In June 1991, the Netherlands reached an accord with all packaging stakeholders to have industry ultimately take back 90 per cent of its packaging, make reuse a priority over recycling, increase one-way return premiums (i.e. no refund) from $0.05 to $0.50. In return the government was to perform product analyses on 27 packaging types by December 1992 in order to better direct future packaging policies.

Sweden

In March 1991, the Swedish Minister of the Environment announced the government's intention to shift the financial responsibility for collection, recycling and recovery from government to "businesses with an economic interest in packaging".[27]

Sweden has also taken an aggressive stance on beverage containers. Past regulatory measures included a ban of steel cans in 1981 and a ban of disposable PET containers in 1991.

Sweden relies on a deposit system and supplementary regulations to ensure beverage container diversion from disposal. Aluminum cans had a recovery rate of 60 per cent with a $0.05 deposit and this increased to 83 per cent when the deposit doubled. Future regulations may force recovery rates to 90 per cent. Refillable beer containers, with a deposit on bottles and their plastic crates, have a return rate of 98 per cent.[28] Refillable plastic soft drink bottles have a 90 per cent return rate. Although few centres exist to serve their return, wine and liquor containers had a 79 per cent recovery rate with a $0.32 deposit.

Norway

Because of a deposit system for refillable containers and high taxes on non-refillables ($0.50 per container), Norway has a very high market share of beverages sold in refillables: beer at 97 per cent, soft drinks at 76 per cent, and wine and liquor at 60 per cent. The percentage of soft drinks in refillables is expected to reach that of beer once the refillable plastic bottle is fully introduced in the country.

Milk and juice containers are not taxed and do not carry a deposit, which means they enter the waste stream.

2.3.4 Possible Directions for Ontario

The above discussion of other jurisdictions presents many policy alternatives which could be followed in Ontario. The OECD has identified five policy measures which are being used to control packaging waste. Of 15 countries belonging to the OECD, the number making efforts in each, in 1991, was:

Effort	*Number of Countries*
Deposit system	11
Negotiations with industry	7
Refill regulations (whole or in part)	4
Taxes on one-way containers	4
Bans on certain materials	4

In general, beverage container controls are just a single component of most northern European countries' waste management strategies. Frequently, restrictions on these containers were the first step leading to further waste management measures.

2.4 Refillable Plastic Bottles

In North America, the move away from refillable containers in the beverage industry has been caused by:

- centralization of the beverage industry;
- introduction of lighter materials such as cans and one-way glass and plastic bottles;
- increased mobility of society; and
- consumer desire for convenience.[20]

The Container Recycling Institute states that centralization was made possible by the introduction of one-way containers which allowed companies to ship long distances without having to return empty refillable bottles to the home plant. This centralization also eliminated many jobs in bottling operations in smaller communities.

The introduction of refillable plastic containers may be able to reverse the trend away from refillables. Refillable PET containers are lightweight and durable with a lifespan of about 25 trips. (A "trip" is one cycle from bottle fill to retail sale to return for refill. Glass beer bottles have a lifespan of about 12-15 trips, and refillable glass soft drink bottles have a lifespan of less than 10 trips.)

There are other advantages to using this type of container. They are:

- safe since they are virtually unbreakable;
- not a health hazard since they do not hold residues as did the three litre polycarbonate milk jugs discontinued in Ontario in the 1970s;
- made out of PET, the same material as the one-way containers in use in Ontario, and thus not revolutionary technology; and
- recyclable at the end of their refillable lives.

The technology for these bottles was developed by the Swiss firm Soudronic SA over 10 years ago.[30] Coca Cola started market testing in November 1986, and in three years, not one consumer complaint was lodged.[31] During this time, initial technical difficulties were solved and reliable cleaning and electronic "sniffing" equipment was developed to ensure even higher levels of public safety.

Refillable plastic bottles for beverages are proving to be immensely popular in Europe. At least six European countries are now using refillable PET where one-way PET has either been banned by governments (eg. Sweden) or rejected by consumers (eg. the Netherlands). Both Coca Cola and Pepsi are marketing their products in 1.5l refillable plastic containers.

The response of North American industry to refillable PET has been surprising. The technology has not been implemented here because of a belief by industry that consumers do not want to be "bothered" with returning containers[32] and that Europeans are more "fastidious" than North Americans.[33] It is unknown whether studies can support these claims.

Not stated is the beverage industry's large concern that the use of this refillable technology in North America would force them to decentralize their production facilities once again. This would increase their operating costs and reduce their profits.

Other Refillable Containers

Refillable PET containers are not the only plastic refillable bottle. Another refillable plastic container and its cleaning equipment have been developed by GE Plastics in Pittsfield, Massachusetts. This polycarbonate bottle is now being used to serve milk to American school children. It is unknown how past safety concerns have been addressed.

3 AMO'S POSITION

3.1 Previous AMO Positions on Refillables

AMO has been addressing the issue of refillables for many years. Since 1985, the membership attending AMO's annual conferences has endorsed ten resolutions concerning deposit systems and returnable bottles. These resolutions are:

From 1985 to 1987:

1) Introduction of A Refund Program on Returned Soft Drink Cans (86-080-7),

2) Refundable Wine and Liquor Bottles (87-080-4).

1988 annual conference:

3) Request for Provincial Legislation to Place a Deposit Charge on All Pop Cans and Non-Reusable Bottles (88-080-14),

4) Legislation to Prohibit The Production of Non-Refundable Bottles and Cans for Beverages (88-080-1).

1989 annual conference:

5) 5 Cent Refundable Deposit on Pop Cans (89-808-14),

6) Non-Returnable Drink Containers (89-080-22).

1990 annual conference:

7) Deposits on Beverage Containers (90-080-3),

8) Deposit and Return System For All Coloured Glass Bottles and Jars (90-080-15),

9) Deposit and Return System for LCBO Products (90-050-6).

1991 annual conference:

10) Garbage Disposal - Initiative re: Refillable and Non-Refundable Containers and Reduced Packaging (90-91-029).

In many of its waste management reports AMO has also taken stands asserting the need for refillable containers.

In the report, The Municipal Waste Abatement Strategy (November 1989)[34], AMO said in Recommendation #8:

> That the prohibition of non-reusable containers, and the regulation of container size, set out in Ontario Regulation 622/85 with respect to soft drink containers, should be strengthened and extended to as many types of container and packaging products as practicable.

In its waste management report entitled, Municipal Solid Waste Management: Whose Problem Is It? (August 1990), AMO stated in Recommendation #22 that:

> The Ontario government should:
>
> a) reject the Recycling Advisory Council's recommendation to eliminate the provincial requirement for soft drink producers to provide at least 30 per cent of their products in refillable containers;
>
> b) continue to encourage reuse as an important component of waste management;
>
> c) encourage people to become aware that recyclable bottles are better for reuse.

In Recommendation #23 of that report, AMO also said:

> The Ontario Ministry of the Environment should:
>
> a) strengthen the regulations requiring soft drink containers to be refillable. It should also extend these to cover all beverage containers;
>
> b) ensure a deposit system is instituted for all beverage containers.

In September 1990, in discussions with AMO representatives, the Ministry of the Environment's staff was reluctant to pursue the idea of refillable containers because it had spent much time getting a Memorandum of Understanding from those industries participating in OMMRI II. The MOE staff said this Memorandum of Understanding stated that the MOE would consult with industry representatives before regulations in this area were developed.

The province's position on refillable containers changed with the election of the new government in October of 1990. However, industry lobbied hard to prevent refillables and their views appeared to be gaining favour with the MOE staff, as AMO witnessed during its April 16, 1991 meeting with the Minister. By then, municipalities had become increasingly concerned that the province's legislation governing soft drink containers would switch from emphasizing requirements for a percentage of refillable containers with a deposit-return system to emphasizing the industry/government Blue Box Recycling Program.

Because of this concern, AMO passed its most recent stance on refillables in AMO's Policy Position on Reduction and Reuse (#91-11, June 1991). Recommendation #34 of this report states:

> The Minister of Environment should not move away from refillable bottles unless the Ministry has done a net environmental analysis, including cost. If it can be shown in a global sense that the Blue Box is most cost effective, then there should be a move to make payment of this system consumer-priced rather than property-tax priced. This would enforce the principle that waste

generators should be responsible for their waste.

3.2 AMO Principles on Refillables

AMO's position regarding refillable containers has been consistent and its present position continues to call for an increased presence of refillable containers. In this section, the principles guiding the position are presented. These principles are based on the necessity of moving up the 4Rs waste minimization hierarchy.

Reduction and Reuse Before Recycling

AMO believes that the Blue Box has been an important element in raising public awareness about waste issues. However, AMO strongly believes in "moving up" the 4Rs hierarchy from recycling to reducing and reusing. Thus, AMO prefers to support reduction and reuse initiatives even if it results in material being directed away from the recycling forum of the Blue Box.

AMO will continue to assume reduction and reuse are environmentally superior alternatives to recycling until a net environmental analysis can prove otherwise. As a result, AMO considers refillable containers the most environmentally sensible option available to goods producers, including the beverage industry.

Principle #1:

AMO believes refillable containers should be used in Ontario because reuse is higher than recycling on the 4Rs waste minimization hierarchy.

Principle #2:

AMO believes the Minister of Environment should not move away from refillable bottles unless the Ministry has done a net environmental analysis, including cost. If it can be shown in a global sense that the Blue Box is most cost effective, then there should be a move to make payment of this system consumer-priced rather than property-tax priced. This would enforce the principle that waste generators should be responsible for their waste.

This second principle is a reiteration of Recommendation #34 of AMO's Policy Position on Reduction and Reuse (#91-11, June 1991).

3.3 Supporting Discussion and Recommendations

AMO is concerned that the current financial arrangement supporting the Blue Box program is not sustainable for the long term and it is interested in promoting waste management alternatives which are environmentally sound and financially self-sufficient. It is also interested in alternatives that improve material recovery rates and equitably distribute costs. This section provides information which supports the direction which AMO would like to see pursued.

Financing Arrangements

Municipalities are currently faced with many financial hurdles. They are suffering from reduced provincial transfer payments and other economic factors related to the recent economic recession. Municipalities must also deal with the uncertain financial aspects of the Blue Box programs, including external financing and Blue Box material revenues.

While municipalities are responsible for most day-to-day activities of waste management, they are dependent upon external sources for the funding of their recycling programs. This dependence has many problems. One is that external sources of funding are not assured. The industry-sponsored OMMRI has promised $45 million

over five years to provide for one third of province-wide start-up costs. However, it has recently admitted that it cannot meet these obligations because it does not have enough money.

Another source of Blue Box funding is the provincial government. The province supports one third of capital costs and between 33 and 50 per cent of operating costs for the first five years of a municipal curbside program. Without other financial arrangements municipalities will be responsible for all operating costs after this time.

The other financial aspect of municipal recycling programs is Blue Box material revenues. These revenues have declined drastically since the advent of widespread Blue Box implementation and this trend shows no sign of reversing. Aluminum, a valuable commodity, has been removed from the Blue Box because most beverage producers have switched to steel for their cans. Glass and steel prices have declined to the point where the materials cannot pay for their cost of collection. Markets, especially for plastic, are difficult to find. Thus, under the current market conditions, Blue Box financial self-sufficiency is not possible.

Role of the Beverage Industry

Municipalities would like to see less waste going to landfill and waste producers take more responsibility for the waste that they generate. AMO believes industry should actively pursue reduction and reuse initiatives to reduce the stream of material which is now being disposed or recycled.

An increased role for the private sector is consistent with previous AMO policies. In AMO's Response to the Recycling Council of Ontario Discussion Paper: Who Should Pay for Recycling (#91-10, February 1991), AMO agreed with the RCO that industry should:

- be responsible for its share of waste diversion;
- provide more long-term financing of the existing system;
- redesign its products and packaging to achieve better waste management;
- close the loop on its products; and

- do more research and development of more efficient collection technologies and systems in order to close the loop.

AMO also stated in this response that it believes that industry should be fully responsible for the costs of operating collection and recycling programs for the waste materials or products that it creates. Continuing this argument, if waste management costs were borne by industry, then product cost structures and consumer prices would incorporate them. This would promote the concepts of full-cost accounting and consumer-based, not taxpayer-based, waste management financing.

Refillable Implementation

Beverage containers account for about ten per cent of Blue Box material by mass and more by volume. This is a sizable portion. Very little of this material can pay for its cost of collection. The most effective and environmentally sound way of removing these containers from the recycling and waste streams is to have them sold in refillable containers.

AMO views refillable plastic containers as a viable technology for responsible beverage industry activity in Ontario. AMO sees two possibilities for its implementation: collection through the Blue Box system or a deposit system.

There are two arguments against using the Blue Box system for capturing refillables. The first is the relatively low recovery rates. Blue Boxes currently cover about two thirds of Ontario households. They capture less than 25 per cent of all soft drink containers sold and about 38 per cent of LCBO wine and liquor bottles. While comparable jurisdictions have recovery rates of 40 per cent,[35] the Ontario Soft Drink Association (OSDA) implied that it could recover 60 to 65 per cent of its containers,[36] and the consultants from Proctor and Redfern foresaw a 65 to 75 percent recovery of LCBO containers with an expanded Blue Box system.[37] Even these higher figures pale in comparison to recovery rates in jurisdictions which impose deposits on beverage containers or high taxes on non-refillables (eg. Maine and northern Europe have recovery rates between 80 and 99 per cent).

The second argument against using the Blue Box for collecting refillables is the large infrastructure and operating costs which would be incurred by municipalities. Current municipal infrastructure has been designed for recyclables only and would have to be changed dramatically. Also, if sorting was required to recover refillables, costs for these expanded recycling operations would be even higher than they are now.

Advantages of a Deposit-Refill System

The other alternative for collecting refillable bottles is a deposit system. A deposit system for refillable beverage containers in Ontario would not be new to Ontario residents. As late as 1984, 50 per cent of soft drinks were sold in refillables which required a deposit, and beer has always had a deposit on its containers. Matching a deposit system with the convenience and safety of refillable plastic containers would only aid consumer acceptance. This section outlines the advantages of a refill-deposit system.

A refill-deposit system is sustainable for the long term. It shifts the responsibility of container collection and processing from public agencies to the producer of the item, and promotes the concept of full-cost accounting. Associated costs are reflected in the product's cost structure and market forces are allowed to work with few distortions. Most importantly, collection and processing is not dependent on short-term grants from government or industry.

Another advantage of a refill-deposit system is that industry would have the opportunity and incentive to improve the system. AMO recognizes the power of the private sector to direct its energies toward a given goal and sees a great opportunity for the private sector to take the issue of refillable containers and arrive at the most efficient solution. Once given the responsibility, industry would have the incentive to innovate and improve its efficiencies.

Of course, to be most effective, an even playing field must be created. This means that all beverage containers have to be included in a refill-deposit system. Overlapping systems (between beverage sectors) may not be the most efficient way of running a deposit system, but the loss of efficiency is traded off for the assurance of industry responsibility. To improve the system, the firms may find it advantageous to work together, as have

the beer producers in most Canadian provinces and industries participating in Germany's Green Dot program.

Bottling and distribution operations would be affected by refill and deposit requirements. The emphasis on more refillable beverage containers would mean that bottlers which do not currently refill their containers would have to purchase cleaning equipment. Some changes may also be required to decentralize bottling operations. However, unlike increases in Blue Box costs, these costs would be borne by the industry and ultimately passed on to consumers. This consumer-based system is equitable and progressive, which AMO believes is desirable for non-essential consumer items.

OSDA claims that it is unfair to use the success of the Brewers Retail as a reason for implementing a deposit system within the soft drink industry. In particular, OSDA cites the difference in the retail structure of the two beverage industries (300 outlets for beer versus 30,000 for soft drinks) as being a major advantage for beer container collection. However, the soft drink industry's distribution infrastructure is already in place for standardized one-way soft drink containers and collecting empty containers when delivering full ones would not present an overwhelming problem. The large retail network also provides a great deal of convenience for consumers when they return their containers for refund.

Deposit-Refill Relationship

In jurisdictions where refillable containers are required, a deposit system has usually been implemented. A high return rate is required to make refillable systems most efficient, and a deposit is a very effective economic tool to have consumers return their containers.

There is also evidence to show that higher deposits result in higher return rates. Both Sweden and Ontario experienced dramatic increases in aluminum can return rates when the deposits were doubled. An increased deposit does not increase the burden on the consumer since all of the deposit is returned when the container is returned. The higher deposit does, however, increase consumer's diligence in returning containers.

Recommendation #1:

The entire beverage industry should voluntarily, or the provincial government should legislate it to:

- **provide refillable container packaging as a consumer option;**
- **institute a deposit system to collect refillable containers. The deposit should provide sufficient economic incentive for meaningful return rates.**

Refillable plastic bottles provide a reasonable alternative to one-way recyclable containers now in wide use in Ontario. AMO is disappointed that refillable plastic, which has proven so successful in Europe, is not being publicly considered by North American beverage producers. These containers provide an obvious solution to serious waste management problems. Society must apply obvious solutions when these present themselves. Switching to refillable plastic would also be helpful in changing the opinions of consumers regarding packaging waste.

Refillable Requirements

AMO has consistently called on the provincial government to enforce its regulations governing minimum refillable soft drink sales. AMO does so once again.

Recommendation #2:

The Minister of the Environment should enforce Ontario regulation 623/85 which requires at least 30 per cent of the volume of carbonated soft drinks to be sold in refillable containers.

AMO considers 30 per cent to be the lowest desirable minimum limit since many European countries require, or have reached, levels at least as great as this.

AMO is also in favour of minimum refill levels to be required for all beverage products. AMO thus encourages the Minister of the Environment to indicate that it is her government's intention to have all beverage industries regulated by minimum refillable requirements.

Recommendation #3:

The Minister of the Environment should indicate that the Ontario government intends to have all beverage industries regulated by minimum refillable requirements.

AMO believes flexibility is required in order to meet refillable targets because of differing levels of experience and expertise in the different beverage sectors. Thus, AMO believes the carbonated soft drink industry should have a shorter time-frame than other beverage sectors to respond to refillable requirements because of its past experience with refillable containers.

Recommendation #4:

The Ministry of the Environment should:

- **give each beverage sector its own time-frame within which it must meet minimum refillable sales targets;**
- **stipulate a time-frame of less than 18 months for the soft drink sector and one of less than three years for other beverage sectors (such as wine and liquor, juice and non-carbonated drink, water, and milk).**

Promoting Refillables

AMO recognizes that refillable requirements, under which the soft drink industry is currently regulated, are difficult to enforce because of such things as convenience, safety and economics. Refillable plastic containers adequately address convenience and safety. The economic incentives of two variations on the straightforward deposit-return system are now compared: the New Brunswick "half back" model and OSDA's refill "reward".

New Brunswick was planning to use a "half back" deposit system which forces consumers to consciously recognize a trade-off between the convenience of one-way containers and money. Under the planned implementation, consumers that purchase non-refillables are penalized by having only half of their deposit returned while refillable containers are eligible for a full refund. New Brunswick hopes that this visible incentive will result in consumer preference for more refillable containers, and that this in turn will lead to the introduction of the refillable plastic bottle in the province.

OSDA's responded to New Brunswick's model by proposing to give a "reward" of $0.10 to consumers who choose refillable containers. OSDA stated that a reward is "more effective in changing consumer behaviour in favour of refillable containers",[38] although no proof was given as to whether consumers react more to a reward than a penalty.

AMO believes that consumers should be made more responsible for the consequences of their purchasing choices. Placing an economic cost on these choices is an effective way of shifting this responsibility to consumers. The New Brunswick model applies this concept in a way which also cleverly raises the consumer's level of environmental awareness with every purchase. The OSDA reward could not be as effective because it does not directly address the issue of non-refillables.

AMO sees the potential of consumer incentive/ disincentive systems, such as the New Brunswick system, to encourage the use of refillables. However, AMO believes the private sector should initially be given the opportunity to develop its own methods to meet these requirements without any other government intervention.

AMO considers such systems plausible add-ons to refill and incentive-free deposit measures, but feels they should only be implemented if satisfactory refill levels are not met through industry efforts after a reasonable amount of time.

Recommendation #5:

The Minister of the Environment should:

- **allow private industry the opportunity to develop its own methods to meet refillable sales targets by deferring any further government intervention until after the stipulated time-frames;**
- **state that she is prepared to implement consumer incentives and disincentives, such as the model proposed in New Brunswick, in beverage sectors which do not meet minimum refillable sales targets within their stipulated time-frames.**

Jobs

Both the LCBO and OSDA documents discussed the impact of refillable containers on employment in the province. This included a threat that if refillables are required, Consumers Glass, the only glass recycler in the province, would be forced to close. Other job losses have also been speculated.

AMO is not convinced that the restructuring of the consumer beverage industry, as a result of refillable containers, would result in overall job loss. For example, research in the area of refillables would provide a number of high-skilled, high-wage jobs. Possible technological breakthroughs could result in opportunities for exporting this technology to other parts of the world, including Germany and Japan.

AMO also notes that many jobs were lost when production was centralized as a result of one-way containers. If local bottling operations, which were closed with the centralization of soft drink operations,

were re-opened, jobs would be regained throughout the province.

3.4 AMO Response to Industry Initiatives

3.4.1 The OSDA Plan

Municipalities have recently been approached by OSDA with a promise of a top-up grant on Blue Box operating costs. Before the Minister of the Environment or AMO had a chance to review the situation, three municipalities agreed to OSDA's offer. These were the Regional Municipality of Halton on November 27, 1991, the City of Hamilton on December 17, 1991 and Metropolitan Toronto on January 15, 1992.

AMO recognizes that there is a need for Blue Box financial support since Blue Box material revenues are down and OMMRI is not meeting its obligations. However, AMO is not in favour of municipalities accepting the top-up grant for a number of reasons.

First, it is currently unknown what the province has in mind for refillable containers or Blue Box financing. The Ministry of the Environment has not yet responded to OSDA's plan, but on January 20, 1992 she asked AMO to encourage municipalities not to endorse it until the refillable bottle issue was settled. Second, while municipalities are facing financing problems for recycling systems, OSDA is also under pressure. It is facing the possibility of an imposed deposit system and would like to use municipal support to influence provincial approval for their plan. AMO feels that a better offer may be possible from OSDA. Finally, the amount of money to be received by municipalities is not significant since only about two per cent of Blue Box operating costs will be financed by the OSDA top-up. Furthermore, any short-term financial gains could have a number of long-term repercussions, namely future responsibility for waste measures and economic sustainability.

Concerns about Responsibility for Future Waste Measures

AMO is concerned about OSDA's argument that, by agreeing to its offer, municipalities would have something with which to negotiate similar deals with other Blue Box material producers.

There are two problems with this argument. First, the onus would be on municipalities to negotiate with other waste producers. It places an additional administrative and financial burden on municipalities for something which the private sector should be responsible for.

Second, any agreement with the soft drink industry does not place individual municipalities in a better bargaining position with other Blue Box material generators. This is especially true regarding the newspaper industry which is the largest contributor of mass to the Blue Box. The newspaper industry is currently dealing with readership and advertising reductions and is unlikely to agree to pay more for recycling regardless of what other industries had agreed.

Concerns about Economic Sustainability

AMO is concerned that OSDA's initiative does not provide an economically sustainable response to Ontario's long-term waste management needs. This is especially relevant to municipalities since another industry-sponsored recycling initiative, OMMRI (of which the soft drink industry is a key member), recently announced that it does not have enough money to pay for its share of the Blue Box start-up costs. OMMRI now owes several Ontario municipalities a considerable amount of money for the Blue Box programs they have started.

No long-term financing arrangement has been outlined by OSDA for operating costs, leaving municipalities again vulnerable to pull-outs by the soft drink industry. While there are currently no other guarantees for municipalities, a sustainable arrangement for beverage containers may be possible by requiring refillable containers.

Difficulties with the Funding Formula

AMO also has some concerns with OSDA's top-up formula. One concern is the formula component "avoided costs of disposal". The argument is that municipalities would have to landfill Blue Box material if it was not recycled, and thus it is the rightful cost of the municipality. This is debatable, and thus in the interim AMO would prefer to see the removal of the "avoided costs of disposal" component from OSDA's formula. By doing so, soft drink producers would be financially responsible for the full costs of recycling, which would provide them with another incentive to

refill their containers.

AMO is also concerned that the "operating costs" component of the formula is based on a calculated average of all Ontario recycling programs. This would mean that smaller or more remote communities would be disadvantaged because of economies of scale or distance to markets.

It is for the above reasons that AMO recommends that municipalities refrain from accepting or in any other way endorsing any part of OSDA's Waste Minimization Action Plan, including the top-up offer.

> **Recommendation #6:**
>
> **Municipalities should refrain from accepting, or in any other way endorsing, any part of the Ontario Soft Drink Association Waste Minimization Action Plan, including the top-up offer.**

What Municipalities Can Do

Despite this preferred policy position, AMO does recognize that the municipal financial situation may be such that municipalities need the OSDA money to sustain their struggling Blue Box program.

For municipalities which are contemplating acceptance, strictly as financial aid for the Blue Box program, AMO encourages them to include in their written negotiations with OSDA that:

- the OSDA offer is accepted as an interim solution to Blue Box financing, and no long-term commitment is implied by accepting the offer;
- acceptance does not preclude the later acceptance of long-term waste management solutions and financing arrangements; and
- the soft drink industry should continue to search for, and seriously assess, the feasibility of long-term waste management solutions, such as an improved refillable bottle infrastructure.

AMO also urges municipalities that choose this route to send a letter regarding their choice and its caveats to the Minister of the Environment.

AMO released the preceding analysis of the OSDA offer in a Newsbill in mid-March 1992. Since then, there has been feedback from many Ontario municipalities. Metropolitan Toronto responded to AMO's newsbill by acknowledging the top-up grant as an interim measure, and by passing a resolution re-iterating its preference for refillable containers. Some municipalities are considering rejecting the top-up because of their concerns about its long-term implications, and others which have accepted the offer are beginning to reconsider their decision.

3.4.2 LCBO Options Document

In the 1991 document produced for the Liquor Control Board of Ontario (LCBO) by the consulting firm Proctor and Redfern, the data show an expanded Blue Box system to be the cheapest in dollar terms. However, AMO points out that these costs would be passed on to municipalities and their taxpayers. AMO would find such a situation unacceptable under current circumstances since the LCBO does not contribute any funds to the Blue Box system, and no indication of future compensation was given in the LCBO document.

AMO also notes that the expanded Blue Box option is inferior to other options, most notably the "Deposit-refund-refill through the LCBO" option, along a number of other socio-economic dimensions, including most waste diverted from landfill, and most land, raw materials and energy conserved.

3.5 Extending to Other Containers

Much of this document has focused on beverage containers. However, AMO believes that waste management problems extend to all consumer packaging. These solutions may not be as obvious as those of beverage containers, but beverage container diversion through refilling should be the first step in changing how we manage our waste.

Germany currently has the most extensive packaging regulations in the world. Germany's model, along with other European strategies, provide ideas for improved waste management in Ontario. The model for refillable beverage containers developed in this paper draws on the European experience to place responsibility for waste squarely on the shoulders of private industry. Implementing such a model could be a first step in setting the tone for future changes to the management of waste products.

4 CONCLUSION

AMO would like industry, and consequently the consumers of their products, to take more responsibility for their waste. Refillable beverage containers for all beverage producers provide an obvious solution to pressing waste management problems.

The use of refillables moves waste up the 4Rs waste minimization hierarchy, is sustainable in the long term, and provides a potential model for future waste management changes. An innovative deposit system could ensure that targets for sales in refillables are met.

Municipalities, as the primary waste managers, have much to contribute to waste management discussions. They, and AMO, are pleased to be included in the on-going discussions which address Ontario's waste management concerns.

SUMMARY OF PRINCIPLES AND RECOMMENDATIONS

Principle #1:

AMO believes refillable containers should be used in Ontario because reuse is higher than recycling on the 4Rs waste minimization hierarchy.

Principle #2:

AMO believes the Minister of Environment should not move away from refillable bottles unless the Ministry has done a net environmental analysis, including cost. If it can be shown in a global sense that the Blue Box is most cost effective, then there should be a move to make payment of this system consumer-priced rather than property-tax priced. This would enforce the principle that waste generators should be responsible for their waste.

Recommendation #1:

The entire beverage industry should voluntarily, or the provincial government should legislate it to:

- provide refillable container packaging as a consumer option;
- institute a deposit system to collect refillable containers. The deposit should provide sufficient economic incentive for meaningful return rates.

Recommendation #2:

The Minister of the Environment should enforce Ontario regulation 623/85 which requires at least 30 per cent of the volume of carbonated soft drinks to be sold in refillable containers.

Recommendation #3:

The Minister of the Environment should indicate that the Ontario government intends to have all beverage industries regulated by minimum refillable requirements.

Recommendation #4:

The Ministry of the Environment should:

- give each beverage sector its own time-frame within which it must meet minimum refillable sales targets;
- stipulate a time-frame of less than 18 months for the soft drink sector and one of less than three years for other beverage sectors (such as wine and liquor, juice and non-carbonated drink, water, and milk).

Recommendation #5:

The Minister of the Environment should:

- allow private industry the opportunity to develop its own methods to meet refillable sales targets by deferring any further government intervention until after the stipulated time-frames;
- state that she is prepared to implement consumer incentives and disincentives, such as the model proposed in New Brunswick, in beverage sectors which do not meet minimum refillable sales targets within their stipulated time-frames.

Recommendation #6:

Municipalities should refrain from accepting, or in any other way endorsing, any part of the Ontario Soft Drink Association Waste Minimization Action Plan, including the top-up offer.

Canada's Beverage Container Deposit Systems

	DATE IMPLEMENTED	CONTAINERS COVERED	AMOUNT OF DEPOSIT	RETURN RATE	DEPOT SYSTEM	UNCLAIMED DEPOSITS	HANDLING FEE	CURBSIDE PROGRAM	RETURN TO VENDOR
BRITISH COLUMBIA	1970 1971	Beer: Soft Drink	Cans-10¢ Refill-10¢ Glass 10-20¢ Cans-5¢ Refill-20¢ PET 2 lt.-30¢	77% 96% 24% 28% 98% 78%	YES	Retained by Industry	1¢	YES	YES
ONTARIO	1985	Beer Soft Drinks	BEER Glass refill-10¢ Cans-10¢ PET-25¢ SOFT DRINKS Glass refill-15-60¢	98% 98% 70% 55% 92%	NO	Retained by Industry	NO	YES	YES
QUEBEC	1984	Beer Soft Drinks All Refills	5¢ 5¢ 5¢-60¢	60.1% All Containers 99%	NO	Used for Environmental Programs	2¢	YES	YES
ALBERTA	1972	All containers except milk, juice boxes & domestic beer.	5¢ < 1 litre 20¢ > 1litre For All Containers	All cans-66% PET-77% Glass-61% Refills-95% Liquor & Wine-73%	YES	Retained by Industry	1.5¢	YES	No
PRINCE EDWARD ISLAND	1977	Beer Soft Drinks Wine Coolers	20¢ < 500ml. 40¢ > 500ml. 80¢ > 1 litre	90% All Containers	YES	Retained by Industry	3¢ < 500 ml. 6¢ > 500 ml. 10¢ > 1.5 liter	YES	YES
YUKON TERRITORIES	1984 1987	Beer: glass Beer: cans Liquor: glass	10¢ 10¢ 25¢	80%	YES	Retained by Industry	NO	NO	NO
NEW BRUNSWICK	1992	Beer Soft Drinks Liquor Mineral Water Juice Juice Drinks Refill Beer Refill Soft Drinks	10¢	N/A 92% 10%	YES	Split between Industry & Government	2¢ plus 1¢ transportation fee where applicable	YES	YES Refillable Soft Drinks
SASKATCHEWAN	1973	Alcohol Soft Drinks Glass Aluminum PET	5¢ < 1litre 10¢ > 1 litre	N/A N/A 65% 82% 80%	YES	Used by Government to fund Environmental Programs	2¢ aluminum cans 3.5¢ one-way glass 5¢ PET	NO	-
NORTHWEST TERRITORIES	1991	Beer Coolers Liquor ABA Beer	10¢ 10¢ 25¢ 10¢	68% All Containers 75%	YES	Retained by Industry	2¢	NO	-

Container Recycling Institute 710 C Street, SE Washington, D.C. 20002 (202) 543-9449 Fax (202) 544-0410

Appendix B - Beverage Container Deposit Systems In The United States

STATE/ CITY	DATE IMPLEMENTED	CONTAINERS COVERED	AMOUNT OF DEPOSIT	REDEMPTION RATE	RECLAMATION SYSTEM	UNCLAIMED DEPOSITS	HANDLING FEE	COMPLEMENTARY PROGRAMS
CALIFORNIA	1987	Beer/Soft Drink Wine Coolers Mineral Water	2.5 cents <24 ounces 5 cents > 24 ounces	Aluminum ..... 88% Glass ..... 76% PET ..... 50% Overall 84%	State certified redemption centers	Used for administration of the program and grants to non-profits	Per container processing fee	Curbside recycling for 35% of pop., non-profit drop-off/ bar/restaurant/ commercial collection
CONNECTICUT	1980	Beer/Malt/Soft Drinks Mineral Water	Minimum 5 cents	Cans ..... 88% Bottles ..... 94% Plastic 70-90%	Retail stores and redemption centers	Retained by Distributor/Bottler	Beer 1.5 cents Soft drink 2 cents	Statewide recycling program serving 80% of population
DELAWARE	1982-1983	Non-aluminum/Beer Malt/Soft Drink Mineral Water <2 qt.	5 cents	N/A	Retail stores and redemption centers	Retained by Distributor/Bottler	20% of Deposit	Statewide Drop-off system with 100 sites, buy-back centers, central processing center which separates metal from recyclables
IOWA	1979	Beer/Soft Drink Wine/Liquor	5 cents	Aluminum ..... 95% Glass ..... 85% Plastic 70-90%	Retail stores and redemption centers	Retained by Distributor/Bottler	1 cent	60% of population has access to either curbside or drop-off recycling
MAINE	1978	Beer/Soft Drink Wine/Wine Cooler Liquor/Juice Water and Tea	Beer/Soft Drink & Juice 5 cents Wine/Liquor 15 cents	Beer/Soft Drink ..... 92% Distilled Spirits ..... 80% Wine ..... 80% Juices/Other Non-carbonated 75%	Retail stores and redemption centers	State receives 50%	3 cents	Curbside recycling serving 14% of population. Drop-off programs serving 55% of population
MASSACHUSETTS	1983	Beer/Soft Drink Carbonated Water	5 cents	Overall 85%	Retail stores and redemption centers	Property of Govt. since 1990	2.25 cents	Curbside recycling in 54 localities, drop-off in 249 localities, buy- back centers
MICHIGAN	1978	Beer/Soft Drink Canned Cocktails Carbonated and Mineral Water	Refill 5 cents Non-refill 10 cents	Overall 93%	Retail stores	75% for environmental programs, 25% for a handling fee	25% of unclaimed deposits	Curbside recycling for 25% of population. Drop-off in 20% of localities
NEW YORK	1983	Beer/Soft Drink Wine Coolers/Carbonated Mineral Water Soda Water	5 cents	Soft Drink ..... 66% Beer 79%	Retail stores redemption centers	Retained by Distributor/Bottler	1.5 cents	Curbside program serving 44% of population, drop-off centers in 75% of localities
OREGON	1972	Beer/Malt/Soft Drink Carbonated Mineral Water	Standard Refill 3 cents Non-refill andNon-standard refill 5 cents	Overall 85%	Retail stores	Retained by Distributor/Bottler	None	Buy back centers Curbside in all but 2 localities of 4000 or more Drop-off centers virtually everywhere.
VERMONT	1973	Soft Drink/Beer Malt/Mineral Water Liquor	Soft Drink/Beer 5 cents Liquor 15 cents	Overall 85%	Certified redemption centers, retail stores	Retained by Distributor/Bottler	3 cents	Curbside programs serving 20% of population Drop-off centers in 95% of localities.
COLUMBIA, MO	1982	Beer/Soft Drinks/Malt Carbonated Mineral Water	5 cents	Overall 85-95%	Retail stores	Retained by Distributor/Bottler	None	Curbside recycling program

ACKNOWLEDGMENTS

The Association of Municipalities of Ontario would like to thank the members of its Environmental Policy Committee who volunteered their time to produce this document. The members of the team were:

Mr. Mike Bradley
Mayor
City of Sarnia

Mr. Gary Cousins
Director of Planning and Development
County of Wellington

Mr. Lucien Berniquez
Reeve
Town of Hawkesbury

Mr. Harry Danford
Councillor
County of Hastings

Ms Dawn Erskine
Councillor
City of London

Mr. David Hall
City Administrator
City of Peterborough

Ms Joan King
Councillor
Municipality of Metropolitan Toronto

Mr. Don Markle
Commissioner of Public Works
Region of Peel

Mr. Terry Mundell
Councillor
County of Wellington

Ms Anne Mulvale
Mayor
Town of Oakville

Mr. Frank O'Hagan
Alderman
City of North Bay

Mr. Lou Romano
Director of Pollution Control
City of Windsor

Mr. Gerald Shortt
Councillor
County of Grey

Mr. David Smith
Waste Management Engineer
City of St. Catharines

Mr. Jack Smylie
Alderman
City of North Bay

Ms Joan Sutherland
County Councillor
New Tecumseth

Mr. Les Tervit
Administrator
Town of Listowel

Ms Judy Wilson
Director of Solid Waste
Environment Services Department
Region of Ottawa-Carleton

Mr. Kelvin Winkler
Mayor
Town of Kenora

Observers:

Mr. Alf Gertzinger
City Engineer
City of Brantford

Ms Cynthia Hyland
Executive Assistant
Association of Municipal
Recycling Coordinators

Ms Brenda Naylor
Project Manager
Energy Pathways Inc.

Staff:

Michael Suski
Assistant Policy Assistant

Noelle Boughton
Policy Analyst

Maria Pontes
Secretary to Policy

ENDNOTES

1. All statistics in this paragraph are from the Ontario Ministry of Municipal Affairs' Background Bulletin. No. 91/11, p.5-6. (December 16, 1991).

2. ibid.

3. Container Recycling Institute (1991). "The Rush to Recycle Thwarting Efforts to Refill and Reuse?" in Container & Packaging Recycling Update. Vol.1 No.1.

4. Proctor and Redfern et al (1991). Environmental Options for Alcohol Beverage Containers, Final Report. p.D1. (report prepared for the LCBO).

5. ibid 4, p.E-21.

6. It's Not Garbage Coalition et al (1991). "NDP Government Set to Repeal Environmental Law?" Press Release. December 10.

7. ibid.

8. R.A. Flemington (1992). "OMMRI Funding Applications and Commitments." letter from OMMRI president and CEO. (January 8).

9. Neil Stevens, Manager of Environmental and Marketing Projects, Brewers Retail, Inc. February 1992. Personal conversation.

10. The two documents released by OSDA are The Waste Minimization Action Plan (June 1991) and The Soft Drink Container Debate in Ontario: 1992 (February 1992).

11. OSDA (1992). The Soft Drink Container Debate in Ontario: 1992. p.8.

12. ibid 4.

13. ibid 4, p.ES1.

14. The Container Recycling Institute produces a regular newsletter and occasional reports. Of note are the newsletter Container & Packaging Recycling Update entitled "Focus on Canada," Vol.1, No.2 (September 1991), and the report Beverage Container Deposit Systems in the United States (January 1992).

15. Organisation for Economic Cooperation and Development Environment Committee, Waste Management Policy Group (1991). Reduction and Recycling of Packaging Waste. Draft Report - August 20. Paris: OECD.

16. Stilwell et al (1991). Packaging for the Environment: A Partnership for Progress. New York: Amacom Books. (Arthur D. Little, Inc., Consultants).

17. Ministry of the Environment Consultation Meeting with AMO, January 20, 1992.

18. Germaine Pataki, New Brunswick Department of Environment, February 1992. Personal Communication.

19. David Brown, British Columbia Ministry of the Environment, February 1992. Personal Communication.

20. ibid 4.

21. Resource Integration Systems (1990). Alberta Soft Drink Association Recycling Options Study. Prepared for the Alberta Soft Drink Association. (June).

22. Container Recycling Institute (1992). Container & Packaging Recycling Update. Vol.2, No.1, p.1 (February).

23. ibid 6.

24. ibid 4. Appendix E.

25. California Department of Conservation, November, 1991, as found in CRI (1992) Beverage Container Deposit Systems in the United States. Washington: CRI. (January).

26. CRI (1992). Container & Packaging Recycling Updated. Vol.2, No.1, p.6. (February).

27. ibid 15.

28. ibid 15.

29. CRI (1991). "The Rush to Recycle Thwarting Efforts to Refill and Reuse?" in Container & Packaging Recycling Update. Vol.1, No. 1.

30. ibid 16.

31. Georg Plester (1989). Assistant Technical Manager, Coca Cola Company, Essen Germany. 1989 SPE Conference Notes.

32. CRI (1991). "Once is not Enough." in Container & Package Recycling Update, Vol.1, No.2 (September).

33. Recycling Council of Ontario (1991). "Consumer acceptance seen as obstacle to refillable bottle." in Ontario Recycling Update, December 1991, p.5.

34. A list of all AMO publications is presented on the inside back cover of this report.

35. ibid 6.

36. ibid 11, p.8.

37. ibid 4, Appendix F.

38. ibid 11, p.5.

PUBLICATIONS ISSUED IN THE "AMO REPORT" SERIES

89-1	AMO Brief to the Province of Ontario: 1989-90 Transfer Payment Announcement
89-2	AMO Response to "Financing Growth-related Capital Needs"
89-3	AMO Report on the Draft Housing Policy Statement
89-4	Property Tax: a Provincial Tax? AMO Presentation to the Standing Committee of Finance and Economic Affairs
89-5	"Salvaging the Partnership": 1989 AMO Submission to Provincial Cabinet
89-6	Response to "Transitions", The Report of the Social Assistance Review Committee
89-7	Review of Bill 20 - An Act to provide for the Payment of Development Charges
89-8	Response to "County Government in Ontario"
89-9	Response to Draft Wetlands Planning Policy Statement
•	AMO Waste Management Study: The Waste Management Planning and Approvals Process
•	AMO Waste Management Study: The Municipal Waste Abatement Strategy
•	AMO Waste Management Crisis: A Shared Responsibility Brief to Provincial/Municipal Policy Forum
90-1	"A New Decade - A New Partnership"
90-2	Bill 107: The Police Services Act
90-3	"New Dimensions": Report of AMO Conditional Grants Review ($25)
90-4	"Reforming the Partnership": AMO Submission to Provincial Cabinet
90-5	AMO Response to the Proposal: "Towards New Heritage Legislation for Ontario"
90-6	Roles and Responsibilities: AMO's Response to the Report of the Provincial-Municipal Social Services Review
90-7	Long-Term Care Reform: AMO's Response to Strategies for Change - Comprehensive Reform of Ontario's Long-Term Care Services
90-8	Brief to the Interministerial Policy Forum: AMO's Responses to the Report of the Provincial-Municipal Social Services Review and Strategies for Change: Comprehensive Reform of Ontario's Long-Term Care Services
•	AMO Waste Management Study: Municipal Solid Waste Management - Whose Problem Is It?
•	AMO Financial Survey - Descriptive Report: Impact of Provincial and Federal Policies on 1989 and 1990 Municipal Budgets
91-1	AMO Pre-Budget Consultation Brief: "Towards Reform of Provincial-Municipal Finance"
91-2	AMO Response to: "Toward Improving the Environmental Assessment Program in Ontario"
91-3	AMO's Response to the 1991 Federal Budget
91-4	AMO's Response to "Back on Track, First Report of the Advisory Group on New Social Assistance Legislation"
91-5	AMO's Response to "Rent Control: Issues and Options"
91-6	Accountability and Special Purpose Bodies: The Example of District Health Councils

91-7	AMO Response to: "Extending Pay Equity By Proportional Value and Proxy Comparison"
91-8	AMO's Response to The Ministry of Environment Discussion Paper: Towards A Sustainable Waste Management System
91-9	AMO's Response to The Waste Section of the Ontario Round Table on Environment and Economy: Challenge Paper
91-10	AMO's Response to The Recycling Council of Ontario Discussion Paper: Who Should Pay for Recycling?
91-11	AMO's Policy Position on Reduction and Reuse
91-12	AMO's Response to the 1991 Ontario Budget
91-13	AMO's Response to "A Housing Framework for Ontario"
91-14	AMO's Response to "Government Land for Housing"
91-15	AMO's Response to "The Report of the Advisory Committee to the Minister of Municipal Affairs on the Provincial-Municipal Financial Relationship, 1991" (The Hopcroft Report)
91-16	AMO's Policy Position on: Scrap Tire Management and the Ontario Tire Tax
91-17	"Disentangling the Provincial-Municipal Relationship": 1991 AMO Submission to the Provincial Cabinet
91-18	AMO's Response to the 1991 Draft Wetlands Policy Statement
91-19	Implementation of the Land Use Planning for Housing Policy Statement: Issues and Recommendations ($15)
91-20	AMO's Response to the Reports of the Premier's Council on Health Strategy
91-21	AMO's Response To: The Ministry of the Environment Waste Reduction Office's Initiatives Paper No. 1, Regulatory Measures to Achieve Ontario's Waste Reduction Targets
92-1	AMO's Response to: Bill 143: An Act Respecting the Management of Waste in the Greater Toronto Area and to Amend the Environmental Protection Act
92-2	AMO's Response to *Open Local Government* (Draft Legislation Re: Conflict of Interest, Open Meetings and Disposal of Property)
92-3	AMO's Response to the *Redirection of Long-Term Care and Support Services in Ontario*
92-4	Framework for Roles and Responsibilities: First Submission to the Commission on Planning and Development Reform in Ontario
92-5	AMO's Policy on Refillable Beverage Containers

Copies of all of the reports in this series are available, at $15.00 each. Please send cheques, payable to the Association of Municipalities of Ontario, to AMO, 250 Bloor Street East, Suite 701, Toronto, Ontario M4W 1E6.